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Claims

1-11 Canceled

12. (New) A method for measuring a distance between a distance sensor (5), which is carried by a vehicle (1), and an object (2), the method comprising:

emitting electromagnetic impulse signals (6); and

receiving signals (7) which are reflected by the object (2), wherein the signal (7) which is reflected by the object (2) comprises a related sequence of pulses (10), each pulse (10) being separated in order to attain a sensed pulse (14), and the sensed pulses (14) are added together and a modulation signal (18) is superimposed onto the received pulses (10) prior to separation and addition.
13. (New) A method according to claim 12, wherein the modulation signal (18) comprises a specified and, during a related sequence of pulses (10), constant amplitude distribution.
14. (New) A method according to claim 13, wherein the modulation signal (18) is distributed uniformly in terms of time, and its amplitude corresponds to a quantisation level (13) during separation of the received pulses, or to an integral multiple of such a quantisation level.
15. (New) A method according to claim 14, wherein the number of the sensed pulses (14) which belong together and the number of quantisation levels (13) which are superimposed with the modulation signal (18) coprimes.
16. (New) A method according to claim 12, wherein the modulation signal (18) is an unbiased modulation signal.

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17. (New) A method according to any one of claims 12, wherein the modulation signal (18) is a sawtooth signal.
18. (New) A method according to claim 12, wherein the quantisation levels (13) are displaced or scaled subject to the modulation signal (18).
19. (New) A method according to claim 12, wherein the received pulses (10) are scaled subject to the modulation signal (18).
20. (New) A method according to claim 12, wherein phases of the received pulses (10) are displaced subject to the modulation signal (18).
21. (New) A method according to claim 12, wherein the time location of at least one of the emitted impulse signals (6) and the signal propagation time is varied, subject to the modulation signal (18).
22. A device for measuring a distance between a distance sensor (5), which is carried by a vehicle (1), and an object (2), the device comprising:

a transmitter (3) being equipped to transmit electromagnetic impulse signals (6);
and

a receiver (4) for receiving signals which are reflected from an object, wherein the receiver is for superimposing a modulation signal (18) onto the received pulse (10) in order to receive signals (7) which are reflected by an object (2) in the form of a related sequence of pulses (10), with each pulse (10) separated in order to attain a sensed pulse (4) and to add together the sensed pulses (14).